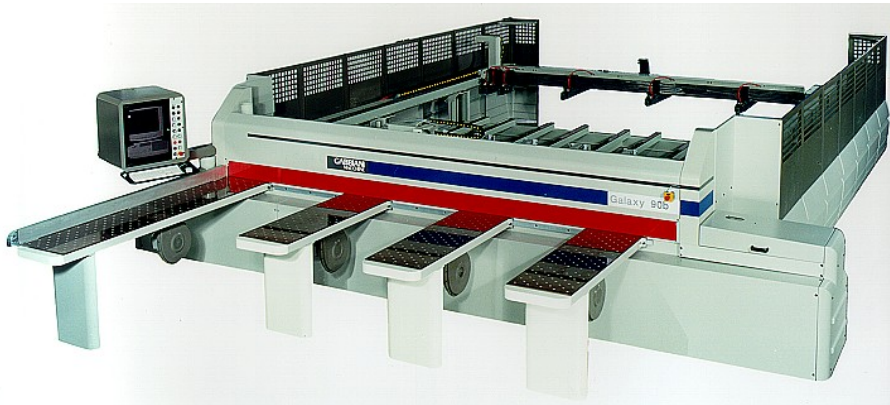


GALAXY 90T PC & Brushless

Precision single blade panel saw with electronically positioning clamp equipped pusher and loading lift table for automatic rip and cross cutting.

**Base unit**

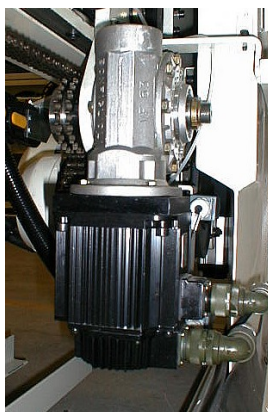
Sturdy machine base with precision saw bed, designed to allow easy access to the internal mechanical parts for service and maintenance purposes.



The single side structure ensures the maximum rigidity and solidity; the two rails for the saw carriage run are located in two processed supports of the base unit for their whole length: the result is an efficient dispersion of the pressure of the saw carriage.

Saw carriage

An innovative saw carriage with two independent motors for main blade and scorer with heavy duty frame, runs, by means of centrifuged wheels, on accurate top and bottom hardness rails in the rear part of the base unit.

**The saw carriage is driven by a brushless motor.**

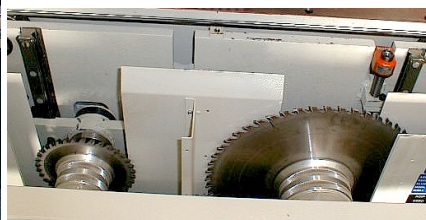
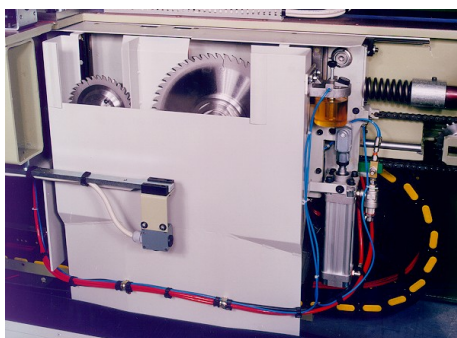
The brushless motor provides optimum performance in the axis movement. They provide a continuous range of adjustment from 0 to its maximum feeding speed.

Return speeds are fixed at their maximum value to provide the highest level of productivity. In addition, the brushless motor requires no maintenance and will provide a much longer life than a standard electrical motor.

Saw carriage speed: 0 – 80 m/min.

The vertical location of the rails in the same part of the base unit makes the whole structure extremely solid.

High precision vertical movement of the main blade and of the scorer is realised with THK guides. Every blade has its own motor.



A pneumatic device (Gabbiani Macchine patent) allows a quick and easy change of the two blades.

The chips produced during cutting operations are discharged from the machine by means of a conveyor placed at the base of the machine

Pressure beam

The innovative hold down pressure beam houses holes, able to fit the grippers eliminating the interference zone with them. In this way the grippers never leave the book, neither during the last cut or the rear trim, until the

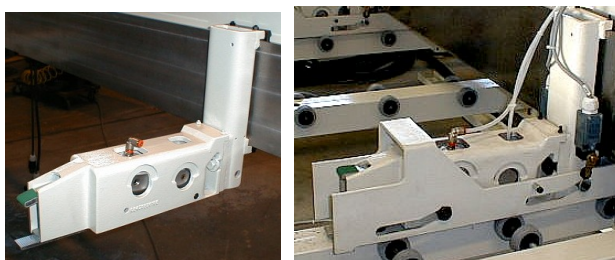
pressure beam has gone down.

The pressure beam slides on bilateral guides and the vertical movement is obtained by two pneumatic cylinders with adjustable air pressure.

The rack and pinion system ensures the perfect parallelism between the pressure beam and the machine bed.

Pusher

The pusher unit consists of a sturdy tubular steel beam equipped with gripping devices. The clamps can be manually moved and fixed into position at given points along the entire span of the pusher beam.



The pusher beam runs on contoured bronze wheels rolling along hardened steel guides fitted onto two support beams.

The positioning of the pusher is transmitted to the PC by a magnetic strip.

This is a separate system from the pusher drive one to avoid errors due to the rack and pinion's clearance and intense mechanical stresses that cause power distortion, thus the magnetic strip guarantees a remarkable positioning precision.

The pusher is driven by a brushless motor; the brushless motors give excellent performances in the axis drives. The brushless motor allows the continuous setting of the speed, with constant torque, in a range starting from 0 m/min. Besides, they don't need any maintenance and feature longer life, smaller dimensions and lower weight than the traditional AC motor.

Pusher speed: 0-40 m/min

Warning: with European standards, the maximum speed is 24 m/min.



Lift table

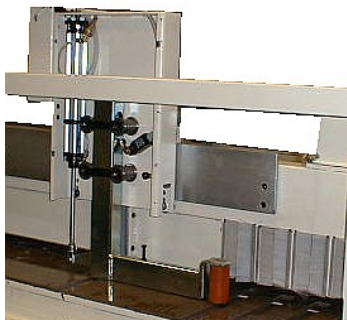
Electronically controlled, by plc through an encoder, lift table with motorized screws 600 mm stroke, no pit. Using irreversible screws for table elevation guarantees accuracy and smooth movement and also provides safety against accidental collapse. The ascent is effected through a rotating lead screw which reduces stress on the lead screws. The table may be provided

with an idle or motor powered roller conveyor.

The table, complete with crossbars, also includes a retractable front aligner unit which is attached to the work table, before the cutting axis.

The standard machine includes:

- automatic side aligner for cross cut



- n.1 set of blades (main blade and scoring blade)
- quick pneumatic set/release of blades for easy changing of blades. The system consists of one flange that locks mechanically the saw blade against the spindle. The flange is pneumatically released by means of compressed air, making possible to change the blades in a short time, with no need of any spanner.



- safety device consisting of a bar over the full length of cut.
- safety device consisting of vertically moving elements following the profile of the panels stack. The descend of the safety device is synchronised with main and alternate pressure beams in order to ensure the finger guard protection during all cycles of the saw.

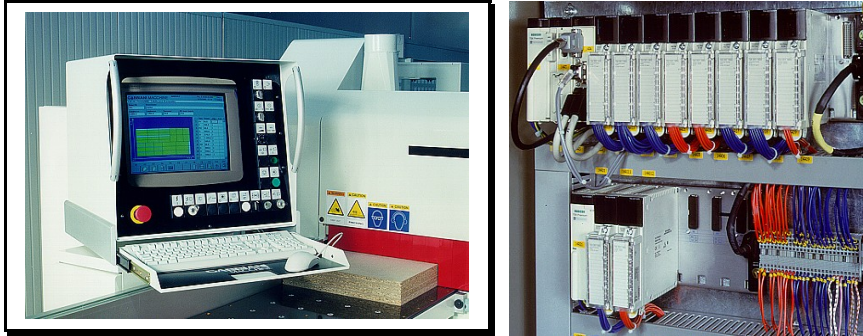


- saw carriage with two independent motors for main and scoring blade.
- delta-star starting of the main blade motor
- chamfered pressure beam
- n.3 grippers for cross cuts
- n.3 grippers for rip cuts

- manual adjustment of the scoring blade
- automatic optimised saw carriage run according to the panels dimensions.

Control system with PC office

Control system made of a Plc and a Personal Computer (user interface)



PC (Siemens) features:

Hardware:

- 15" svga colour screen
- Intel Celeron microprocessor (700 Mhz)
- 64 Mb RAM
- 10,5 Gb hard disk
- 1.44 mb std 3.5" floppy disk drive
- CD-ROM 48x
- 2 serial ports and 1 parallel port
- std alphanumeric keyboard
- possibility of inserting any network card
- higher configurations can also be supplied

Software:

"Seziona" software working in Windows 98 environment.

Machine functions

- automatic mode: execution of programs and/or lists of programs
- semiautomatic mode: execution with 4 different measurements, which can be set using the keyboard and/or with automatic measurement of strip width (autosetting)
- passage from automatic to semiautomatic mode during program execution (for any cut) and returning to automatic mode (starting again the program from the point at which it was interrupted)
- multitasking that allows to program or use of every control function even during machining.

Programming:

- 5 different cutting levels: precutting/x/y/u/v
- possibility of programming blind cuts (mortises) with automatic width calculation
- display of cutting diagrams programmed
- maximum number of lines per program: 100
- maximum number of lines per list: 100
- maximum number of programs and lists: until hard disk memory limit is reached (approx. 80% of the capacity of the hard disk fitted)
- editor for the data on the labels associated to each program

Run time:

- display (during machining) of cutting diagram, with indication of the cuts as

they are made

- guided help (during machining) for the operator referring to the workpieces cut to handle.

- display (during machining) of the current line and list

Diagnostics:

- self-diagnostic and indication of any errors or possible faults by alarm messages

- tips on recommended action (with possibility of entering further observations for each type of alarm)

Production report:

- report of daily production, with all relevant data (machining start and end times, number, surface area and volume of material machined) stored on the hard disk

Imports:

- importation of files in the Ottimo format ("standard + export" and "top + export" versions)

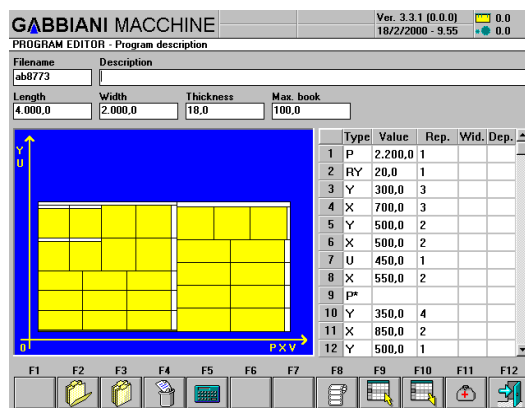
Language and unit of measurement:

- operator interface in the following languages: italian, french, english, spanish

- unit of measurement: millimetres-tenths or inches-thousandths

Warning:

the description of the control system includes functions that are present only with a suitable panel saw mechanical or electrical set up. As a result, the mortises, autsetting and label data editor in each program are present only with the relative optional devices, shown in



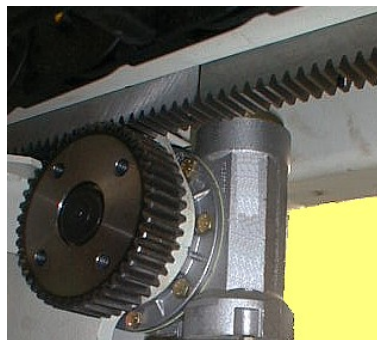
Optional on request

G1.00.32 European standards 90T 32 (CE mark)

Compliance with ce standards envisages:

- fencing around the plant with guards along the entire perimeter of the machine.
- protection of the front loading/unloading openings for the material with splinter-prevention rebound straps and an emergency bar (with the exception of plants which have fully automated unloading).
- access to blade change-over or set up operations with electro-mechanical devices that interact with the emergency circuit.
- blade locking chucks with mechanical locking
- other electrical safety devices fitted directly in the machine wiring.

Base unit - Saw carriage

G2.01.07 Saw carriage with rack and pinion

Rack and pinion mating for the motion transmission to the saw carriage. This solution ensures a better cutting quality thanks to the continuous traction of the pinion's teeth on the rack's ones.

G2.00.87 Main blade motor 15 hp - 11 kw (50 hz)**Frontal loading tables**

G2.00.74 Air cushion table with guide - 2500x500 mm

Bench for material loading and unloading covered with phenolic stratificate with left fence perpendicular to the cutting axis. Provided with an its own motor and on purpose spheres, it ensures the presence of an air cushion between the surface and the book for an easy handling of it.

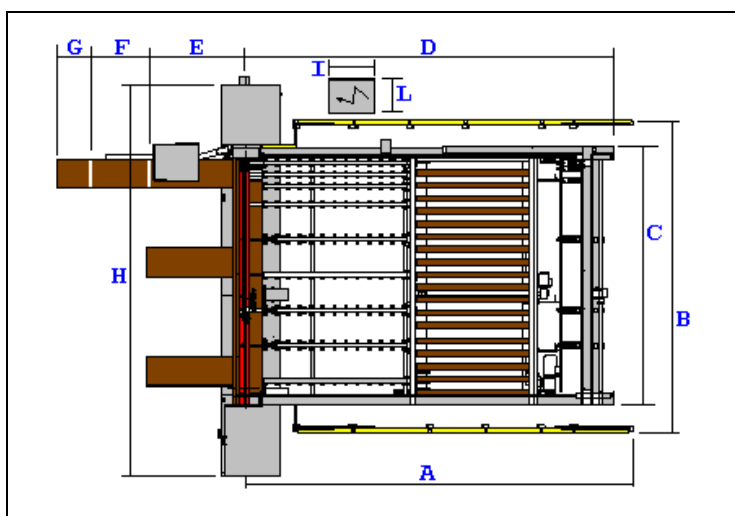
G2.00.79 Air cushion table - 1500x500 mm

Bench for material loading and unloading covered with phenolic stratificate. Provided with an its own motor and on purpose spheres, it ensures the presence of an air cushion between the surface and the book for an easy handling of it.

Lifting table

G4.00.46 Rear loading 3200x2200 mm table with bars

Galaxy 90T 32 - Rear loading



- A: 6700 mm
- B: 4650 mm
- C: 3900 mm
- D: 5700 mm
- E: 1800 mm
- F: 2800 mm
- G: 3300 mm
- H: 5700 mm
- I: 1200 mm
- L: 600 mm

Control system: PC office

Base machine technical data

Cutting length:	3200 mm
Lift table depth:	1850 mm
Blade protrusion:	90 mm
Main blade maximum diameter:	350 mm
Main blade motor power:	10 hp - 50 hz
Main blade rpm:	3900 - 50 hz
Scoring blade diameter:	160 mm
Scoring blade motor power:	2 hp - 50 hz
Scoring blade diameter:	6350 - 50 hz
Saw carriage feeding speed:	0-80 m/min
Saw carriage return speed:	80 m/min
Transmission:	chain
Pusher feeding speed:	0 - 40 m/min
(with CE mark the maximum forward speed is 24 m/min)	
Pusher return speed:	40 m/min
Pusher motor:	brushless
N. grippers:	6
Sucked air	
Air speed:	35 m/sec
Suction openings:	n.2 - diameter
120 mm	

150 mm	n.1 - diameter
Sucked air:	4500 m ³ /h
Compressed air	
Internal diameter openings:	¼" gas mm
Air consumption:	300 Nl/min
Pressure:	7 bar

Warning: the above mentioned data refer only to the base machine and can be changed according to devices on request.